

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 160721	FOR FURTHER ACTION <small>see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.</small>	
International application No. PCT/NL 99/ 00737	International filing date (day/month/year) 02/12/1999	(Earliest) Priority Date (day/month/year) 02/12/1998
Applicant CENTRUM VOOR PLANTENVEREDELINGS EN REPRODUKTIE ...		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☒ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☒ furnished subsequently to this Authority in computer readable form.

☒ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☒ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☒ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

1
☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

NL 99/00737

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/53 C12N15/54 C12N15/55 C12N15/60 C12N15/11
 C12N15/82 C12N9/10 C12N9/18 C12N9/88 C12N9/04
 C12P7/62 C12Q1/68 C07K16/40 A01H5/00 G01N33/50

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C12P C12Q C07K A01H G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	STERKY F. ET AL.: "EST sequence AC AI164913" EMBL DATABASE, 11 November 1998 (1998-11-11), XP002136726 Heidelberg the whole document	41
X	AN G.: "AC AT000069" EMBL DATABASE, 22 April 1998 (1998-04-22), XP002107089 Heidelberg the whole document	18
X	LAUTER F.: "AC X92855" EMBL DATABASE, 8 November 1996 (1996-11-08), XP002107090 Heidelberg the whole document	27

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

2 May 2000

Date of mailing of the international search report

15/05/2000

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INTERNATIONAL SEARCH REPORT

International Application No

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WILLIAMSON J. ET AL.: "AC U24561" EMBL DATABASE, 19 July 1995 (1995-07-19), XP002107091 Heidelberg the whole document	30, 31
X	BOUDET A. ET AL.: "AC I14661" EMBL DATABASE, 6 October 1995 (1995-10-06), XP002107092 Heidelberg the whole document	34
X	BOJORQUEZ G. ET AL.: "Peroxisomal thiolase mRNA is induced during mango fruit ripening" PLANT MOLECULAR BIOLOGY, vol. 28, no. 5, August 1995 (1995-08), pages 811-820, XP002107093	21
A	* see esp. p.818 l.par. - p.819; figure 1 *	1-20, 22-52
X	MANNING K.: "Isolation of a set of ripening-related genes from strawberry: their identification and possible relationship to fruit quality traits" PLANTA, vol. 205, 1998, pages 622-631, XP002107094 * see the whole document, esp. table 1 ref. AF041395; AF041389 *	1-9, 11, 49, 50
X	WO 97 27295 A (HORTICULTURE RESEARCH INTERNAT ; MANNING KENNETH (GB)) 31 July 1997 (1997-07-31) cited in the application the whole document	1-15, 23-25, 44, 49-52
A	MANNING K.: "Genetic and environmental manipulation of horticultural crops" 1998, CAB INTERNATIONAL, WALLINGFORD XP002107099 * see esp. p.57/58; p.59/60 * page 51 -page 61	1-52
A	MANNING K. ET AL.: "Ripening enhanced genes of strawberry: their expression, regulation and function" ACTA HORTICULTURAE, no. 439, 1997, pages 165-167, XP002107095 the whole document	1-52

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International Application No

NL 99/00737

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>WILKINSON J Q ET AL: "IDENTIFICATION OF MRNAS WITH ENHANCED EXPRESSION IN RIPENING STRAWBERRY FRUIT USING POLYMERASE CHAIN REACTION DIFFERENTIAL DISPLAY" PLANT MOLECULAR BIOLOGY, vol. 27, no. 6, 1 March 1995 (1995-03-01), pages 1097-1108, XP000670213 the whole document</p> <p>----</p>	1-52
A	<p>PÉREZ A. ET AL.: "Evolution of strawberry alcohol acyltransferase activity during fruit development and storage" JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, vol. 44, 1996, pages 3286-3290, XP002107096 cited in the application * see esp. p.3289 r.col. - p.3290 *</p> <p>----</p>	1-16, 43-52
A	<p>WO 94 13797 A (HINDE RICHARD ; LEE ELIZABETH (AU); SPEIRS JAMES (AU); BRADY COLIN) 23 June 1994 (1994-06-23) the whole document</p> <p>----</p>	1-52
A	<p>AHARONI A. ET AL.: "Isolation and characterization of cytochrome P-450 cDNAs from strawberry fruit" FASEB JOURNAL SUPPL., vol. 11, no. 9, July 1997 (1997-07), page A811 XP002107097 abstract</p> <p>----</p>	1-52
A	<p>LOPEZ-GOMEZ R ET AL: "Changes in mRNA and protein synthesis during ripening in mango fruit." JOURNAL OF PLANT PHYSIOLOGY 1993, vol. 141, no. 1, 1993, pages 82-87, XP000905556 ISSN: 0176-1617 the whole document</p> <p>----</p>	1-52
T	<p>MEDINA-ESCOBAR N. ET AL.: "AC U63534" EMBL DATABASE, 6 January 1999 (1999-01-06), XP002107098 Heidelberg the whole document</p> <p>-----</p>	29-32

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

NL 99/00737

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9727295	A	31-07-1997	AU 1316297 A EP 0876481 A	20-08-1997 11-11-1998
WO 9413797	A	23-06-1994	AU 690530 B AU 5688794 A EP 0674708 A JP 8504326 T US 5821398 A US 6011199 A	30-04-1998 04-07-1994 04-10-1995 14-05-1996 13-10-1998 04-01-2000